

What is claimed is:

1. A method for preventing or treating a subject having nephropathy comprising:
administering to an individual in need of such treatment an effective amount of a
compound which is an incretin, a GLP-1, an exendin, binds to a receptor for
5 glucagon-like peptide-1, or a biologically active agonist, analog, derivative, variant,
or fragment of any of them.
2. The method of claim 1 wherein the glucagon-like peptide-1 is GLP-1 or a
biologically active analog, derivative, variant, or fragment thereof.
3. The method of claim 1 wherein the exendin is exendin-3, exendin-4, or a
10 biologically active analog, derivative, variant, or fragment thereof.
4. The method of claim 1 wherein the composition is administered in a dose of
from about 0.001 pmol/kg to 20 nmol/kg.
5. The method of claim 1 wherein the composition is administered in a dose of
from about 0.001 µg/kg/dose to about 1.0 µg/kg/dose.
- 15 6. The method of claim 1 wherein the composition is administered in a dose
sufficient to achieve a therapeutic plasma level of at least 40 pg/ml.
7. The method of claim 1 wherein the compound is administered parenterally.
8. The method of claim 4 wherein the compound is administered intravenously in
a dose of from about 0.1 pmol/kg/min. up to about 10 pmol/kg/min.
- 20 9. The method of claim 1 wherein the compound is administered subcutaneously
in a dose of from about 0.1 pmol/kg/min to 75 pmol/kg/min.
10. A method for preventing progression to ESRD in a subject having
nephropathy comprising administering to an individual in need of such treatment an
effective amount of a compound which is an incretin, a GLP-1, an exendin, binds to a
25 receptor for glucagon-like peptide-1, or a biologically active agonist, analog,
derivative, variant, or fragment of any of them.
11. The method of claim 10 wherein the glucagon-like peptide-1 is GLP-1 or a
biologically active analog, derivative, variant, or fragment thereof.
12. The method of claim 10 wherein the exendin is exendin-3, exendin-4, or a
30 biologically active analog, derivative, variant, or fragment thereof.
13. The method of claim 10 wherein the composition is administered in a dose of
from about 0.001 pmol/kg to 20 nmol/kg.
14. The method of claim 10 wherein the composition is administered in a dose of
from about 0.001 µg/kg/dose to about 1.0 µg/kg/dose.

15. The method of claim 10 wherein the composition is administered in a dose sufficient to achieve a therapeutic plasma level of at least 40 pg/ml.
16. The method of claim 10 wherein the compound is administered parenterally.
17. The method of claim 13 wherein the compound is administered intravenously
5 in a dose of from about 0.1 pmol/kg/min. up to about 10 pmol/kg/min.
18. The method of claim 1 wherein the compound is administered subcutaneously in a dose of from about 0.1 pmol/kg/min to 75 pmol/kg/min.
19. A method of improving endothelial function in a subject in need thereof comprising administering a compound which is an incretin, a GLP-1, an exendin,
10 binds to a receptor for glucagon-like peptide-1, or a biologically active agonist, analog, derivative, variant, or fragment of any of them.
20. The method of claim 19 wherein the glucagon-like peptide-1 is GLP-1 or a biologically active analog, derivative, variant, or fragment thereof.
21. The method of claim 19 wherein the exendin is exendin-3, exendin-4, or a
15 biologically active analog, derivative, variant, or fragment thereof.
22. The method of claim 19 wherein the composition is administered in a dose of from about 0.001 pmol/kg to 20 nmol/kg.
23. The method of claim 19 wherein the composition is administered in a dose of from about 0.001 µg/kg/dose to about 1.0 µg/kg/dose.
- 20 24. The method of claim 19 wherein the composition is administered in a dose sufficient to achieve a therapeutic plasma level of at least 40 pg/ml.
25. The method of claim 19 wherein the compound is administered parenterally.
26. The method of claim 22 wherein the compound is administered intravenously in a dose of from about 0.1 pmol/kg/min. up to about 10 pmol/kg/min.
- 25 27. The method of claim 19 wherein the compound is administered subcutaneously in a dose of from about 0.1 pmol/kg/min to 75 pmol/kg/min.
28. A method for reduce proteinuria in a patient comprising administering to an subject in need of such treatment an effective amount of a compound which is an incretin, a GLP-1, an exendin, binds to a receptor for glucagon-like peptide-1, or a
30 biologically active agonist, analog, derivative, variant, or fragment of any of them.
29. The method of claim 28 wherein the glucagon-like peptide-1 is GLP-1 or a biologically active analog, derivative, variant, or fragment thereof.
30. The method of claim 28 wherein the exendin is exendin-3, exendin-4, or a biologically active analog, derivative, variant, or fragment thereof.

31. The method of claim 28 wherein the composition is administered in a dose of from about 0.001 pmol/kg to 20 nmol/kg.
32. The method of claim 28 wherein the composition is administered in a dose of from about 0.001 µg/kg/dose to about 1.0 µg/kg/dose.
- 5 33. The method of claim 28 wherein the composition is administered in a dose sufficient to achieve a therapeutic plasma level of at least 40 pg/ml.
34. The method of claim 28 wherein the compound is administered parenterally.
35. The method of claim 31 wherein the compound is administered intravenously in a dose of from about 0.1 pmol/kg/min. up to about 10 pmol/kg/min.
- 10 36. The method of claim 28 wherein the compound is administered subcutaneously in a dose of from about 0.1 pmol/kg/min to 75 pmol/kg/min.
37. A method for preventing or slowing progression of glomerulosclerosis in a subject comprising administering to an individual in need of such treatment an effective amount of a compound which is an incretin, a GLP-1, an exendin, binds to a
- 15 receptor for glucagon-like peptide-1, or a biologically active agonist, analog, derivative, variant, or fragment of any of them.
38. The method of claim 37 wherein the glucagon-like peptide-1 is GLP-1 or a biologically active analog, derivative, variant, or fragment thereof.
39. The method of claim 37 wherein the exendin is exendin-3, exendin-4, or a
- 20 biologically active analog, derivative, variant, or fragment thereof.
40. The method of claim 37 wherein the composition is administered in a dose of from about 0.001 pmol/kg to 20 nmol/kg.
41. The method of claim 37 wherein the composition is administered in a dose of from about 0.001 µg/kg/dose to about 1.0 µg/kg/dose.
- 25 42. The method of claim 37 wherein the composition is administered in a dose sufficient to achieve a therapeutic plasma level of at least 40 pg/ml.
43. The method of claim 37 wherein the compound is administered parenterally.
44. The method of claim 40 wherein the compound is administered intravenously in a dose of from about 0.1 pmol/kg/min. up to about 10 pmol/kg/min.
- 30 45. The method of claim 37 wherein the compound is administered subcutaneously in a dose of from about 0.1 pmol/kg/min to 75 pmol/kg/min.
46. The method of claim 1 wherein the nephropathy is caused by diabetes, insulin resistance, or hypertension.